

REQUEST FOR RECONSIDERATION

Claims 1-7, 9 and 11-19 remain active in this application.

The claimed invention is directed to a skin cleansing composition as well as a method of skin cleansing.

Applicant wishes to thank examiner Channavajjala for the helpful and courteous discussion held with his U.S. representative on November 10, 2009. At that time, applicant's U.S. representative provided the examiner with clarification as to the evidence previously submitted as to the lack of formation of an isotropic solution having a bicontinuous structure as well as provided a presentation documenting an enhanced make-up removal using a composition having the claimed bicontinuous structure. The following is intended to expand upon the discussion with the examiner.

Skin cleaning often faces the problem of concurrently removing oil-soluble and water-soluble material. Emulsion formulations can provide imbalanced cleansing ability favoring removal of the stains compatible with the continuous phase of the emulsion. Efforts to date with compositions of a bicontinuous structure have displayed difficulty with respect to cleansing ability, removability, as well as environmental compatibility. Accordingly, skin cleansing compositions demonstrating broad soil removing ability and a bicontinuous structure are sought.

The claimed invention addressed this problem by providing a skin cleaning composition comprising an oil component, a hydrophilic nonionic surfactant, a lipophilic amphiphile which is at least one amphiphile selected from the group consisting of **fatty alcohols having 8 to 25 carbon atoms, fatty acids having 8 to 25 carbon atoms and monoalkylphosphoric acids having 8 to 25 carbon atoms**, a water-soluble solvent and water, the composition having **an isotropic liquid phase exhibiting a bicontinuous**

**structure** and a ratio of water-soluble substance to hydrophilic nonionic surfactant plus lipophilic amphiphile of at least 1. Applicant has discovered that such a composition having an isotropic liquid phase exhibiting a bicontinuous structure provides for effective skin cleaning of both oil and aqueous stains. Such a skin cleaning composition is nowhere disclosed or suggested in the cited art of record.

As evidence of an enhancement in make-up removal effectiveness observed when a sample has an isotropic solution having a bicontinuous structure, applicant has conducted additional experiments, submitted in the form of the second declaration of Mr. Atsushi Tomokuni, a researcher for Kao Corporation, the assignee of the above-identified application and the named inventor.

Mr. Tomokuni compared the make-up removal effectiveness of a composition having an isotropic liquid phase exhibiting a bicontinuous structure as claimed (Example 1), with a composition (Reference 1) having merely a liquid crystal structure as in example 1 of Watanabe et al.

The two samples were prepared and their effectiveness at removing waterproof mascara was measured. The results are illustrated below:



**Example 1**

**Not treated**

**Reference 1**

The pictures clearly illustrate a greater effectiveness at removing waterproof mascara for example 1, exhibiting an isotropic solution having a bicontinuous structure, than the liquid crystal phase composition of Watanabe et al. (Reference 1).

Further, Mr. Tomokuni tested Examples 9 and 10 of the above-identified application for evidence of the formation of a bicontinuous structure in which all three samples spontaneously dissolved oil soluble dye and water soluble dye, suggestive that all the samples have a bicontinuous structure.

In view of applicant's additional evidence of an enhanced make-up removal for an isotropic solution having a bicontinuous structure, the claimed invention would not have been obvious over the cited art of record.

The rejections of claims 1-7, 9 and 11-19 under 35 U.S.C §103(a) over Watanabe et al. U.S. 6,346,507 in view of EP 103910 and Lorant U.S. 6,333,362 are respectfully traversed.

The references fails to identify a lipophilic amphiphile as a component of an isotropic liquid phase exhibiting a bicontinuous structure.

Watanabe et al. describes a liquid crystal composition having a liquid crystal phase and/or an isotropic surfactant continuous phase (e.g. a bicontinuous structure) (see abstract and page 3 of applicants' specification). The composition comprises 1-70 wt. % of a silicone oil (column 3, lines 55-67), 10-60 wt.% of a non-ionic surfactant (column 3, lines 13-27) such as polyethylene glycol fatty acid ester (column 3, line 19), 1-50 wt. % of a water-soluble substance having a hydroxyl group (e.g. ethanol, propanol (column 3, lines 28-48) and 10-60 wt. % water (column 4, lines 6-8). A one-phase system of isotropic surfactant continuous phase is described (column 3, lines 4-8). In spite of the description of an isotropic surfactant continuous phase, the reference **fails to disclose** 1-45 wt. % of a lipophilic amphiphile of a

fatty alcohol, a fatty acid or a monoalkylphosphoric acid as a **component of** an isotropic liquid phase **exhibiting a bicontinuous phase**.

The basic deficiencies of the primary reference are not cured by EP '910 or Lorant.

EP '910 had been cited for a disclosure of emollients and skin conditioning agents such as fatty acids and fatty alcohols which have been identified by applicant as suitable lipophilic amphiphiles. The office action reasons that such a disclosure provides motivation to include fatty acids and/or fatty alcohols **in a cosmetic composition** for the purposes of treating dry skin and providing a barrier protection.

Lorant has been cited for disclosing that a fatty alcohol is a known coemulsifier in an **oil-in-water** emulsion. The effectiveness as a coemulsifier in an oil-in-water emulsion provides no expectation as to the formation of a isotropic liquid phase exhibiting a bicontinuous structure.

Applicant has previously submitted evidence that addition of a lipophilic amphiphile to a liquid crystal-phase coexisting system according to Watanabe et al. does not provide for the claimed composition. The Tomokuni declaration tested whether there was formation of an isotropic liquid phase exhibiting a bicontinuous structure having a lipophilic amphiphile incorporated therein by adding a lipophilic amphiphile to the liquid crystal composition of Watanabe et al. Applicant submits herewith, a paper copy of the first Tomokuni declaration in which the evidence should be more easily visualized.

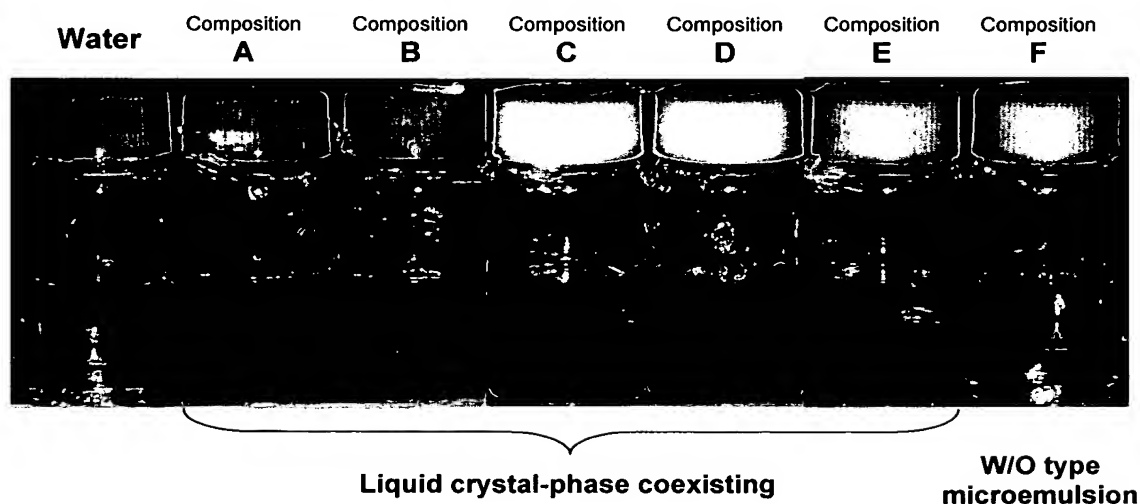
Example 1 of Watanabe et al. U.S. 66,346,507 was produced as Composition A. Compositions B-F were prepared by adding 1-dodecanol, a lipophilic amphiphile. Corresponding amounts of water were reduced in order to maintain proportions of the remaining components.

	Ingredient	A	B	C	D	E	F
(A) nonionic surfactant	Polyoxyethylene (5 mol) Dodecyl Ether	25	25	25	25	25	25
(B) water-	Ethanol	5	5	5	5	5	5

soluble							
(C) silicone oil	Decamethylcyclopentasiloxane	45	45	45	45	45	45
(D) Water	Purified Water	25	24	22	20	15	10
Lipophilic Amphiphile	1-Dodecanol	-	1	3	5	10	15
		100	100	100	100	100	100

The compositions were analyzed visually, through polarized plates, and, if necessary for colorant solubility. The presence of an isotropic solution having a bicontinuous structure would be indicated by visual transparency, and/or translucency, an absence of gleaming under polarized light and the ability to dissolve oil-soluble and water soluble colorants. The pictures from the declaration are reproduced below.

***Pictures of compositions taken though polarized plates***



None of Compositions A-E provided any evidence of an isotropic solution having a bicontinuous structure in terms of transparency or light polarization and were illustrative of a liquid crystal-phase coexisting system. Composition F, while visibly transparent, was in the form of a w/o type microemulsion and failed to demonstrate light polarization and also failed to dissolve a water-soluble dye.

Thus, applicant has provided evidence that an isotropic liquid phase exhibiting a bicontinuous structure does not naturally flow from the suggestion of the cited references. To

the contrary, the proposed combination of references provides for a liquid crystal-phase coexisting system. Applicant is not arguing the references separately, but rather has provided evidence of **the results of the combination** as suggested by the examiner.

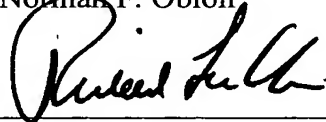
Since an isotropic liquid phase exhibiting a bicontinuous structure does not naturally flow from the cited combination of references, the claimed invention having an isotropic liquid phase exhibiting a bicontinuous structure would not have been obvious and accordingly, withdrawal of the rejections under 35 U.S.C. §103(a) is respectfully requested.

Applicant submits that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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Norman F. Oblon



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